## Residence Usage Volume Discount Documentation

- Exhibit 11A Documentation of Usage Volume Discount Computation
- Exhibit 11B MSA 1 Undiscounted Revenue Distribution and Volume Discount Computation (Proprietary)
- Exhibit 11C MSA 2-16 Undiscounted Revenue Distribution and Volume Discount Computation (Proprietary)

## Documentation of Usage Volume Discount Computation

## Background

This exhibit documents a replacement method of computing the usage volume discount in compliance with the Commission's order in the 2001 annual filing docket. <sup>1</sup> The usage volume discount is based on the amount of usage that each customer generates with higher volume customers receiving a higher discount. The replacement method computes the volume discount for the actual usage distribution of customers. As a result, this method neither systematically over-states or under-states the revenue impact of the usage volume discount.

## Illustration of Replacement Volume Discount Methodology

The table below shows the current volume discount schedule and hypothetical proposed prices with changes in the discount of 28.30 % and 33 % and discount range from \$ 10.40 to \$ 15.00. The proposed schedule is a hypothetical used to demonstrate the impact of volume discount changes and does not reflect any anticipated price changes.

Row	Current	Current	Proposed	Proposed	Current	Proposed
	Low End of	High End of	Low End of	High End of	Discount	Discount
	Range	Range	Range	Range	Percent	Percent
1	\$0.00	\$2.60	\$0.00	\$2.60	0.00%	0.00%
2	\$2.60	\$5.20	\$2.60	\$5.20	15.00%	15.00%
3	\$5.20	\$10.40	\$5.20	\$15.00	20.00%	20.00%
4	\$10.40	\$26.00	\$15.00	\$26.00	28.30%	33.00%
5	\$26.00	\$52.00	\$26.00	\$52.00	33.00%	33.00%
6	\$52.00	\$104.00	\$52.00	\$104.00	33.00%	33.00%
7	<b>\$10</b> 4.00	NA	\$104.00	NA	33.00%	33.00%

The computation below shows how a customer with \$10.00 of usage would be impacted by the current volume discount structure:

Calculation of the Volume Discount for a Customer Making \$10.00 of Calling

Row	Current Range	Customer Revenue within Range	Current Percent Discount	Amount of Discount
1	\$0.00 - \$2.60	\$2.60	0.00%	\$0.00
2	\$2.60 - \$5.20	\$2.60	15.00%	\$0.39
3	\$5.20 - \$10.40	\$4.80	20.00%	\$0.96
4	\$10.40-\$26.00	\$0.00	28.30%	\$0.00
5	\$26.00-\$52.00	\$0.00	33.00%	\$0.00
6	\$52.00-\$104.00	\$0.00	33.00%	\$0.00
7	Over \$104.00	\$0.00	33.00%	\$0.00
Total		\$10.00		\$1.35

<sup>&</sup>lt;sup>1</sup> Illinois Commerce Commission Order in Docket 01-0302 finding and ordering paragraph 9: "IBT shall develop a replacement methodology for determining the impact of usage volume discounts, for use in future filings and shall provide documentation supporting this new methodology in its annual filing made in 2002 for calendar year 2001."

This table shows that the customer with \$10.00 of usage revenue for the first \$2.60 would receive no discount, the next \$2.60 would receive a 15% discount and the final \$4.80 would receive a 20% discount for a total discount of \$1.35. The current prices are based on the prices introduced in the July 2001 annual filing.

The table below documents how the price model would be updated to reflect the replacement methodology. In addition to the volume discount changes (28.30 % to 33 % and discount range from \$ 10.40 to \$ 15.00), the price model assumes reducing the Band A initial minute price during the shoulder peak period from \$ 0.045 to \$ 0.04.

A separate spreadsheet calculates the individual volume discounts for over 150 different revenue levels (See attached). Supporting documentation of this calculation is included in the Annual Price Cap filing. Proposed revenue levels are adjusted by the percentage change in the proposed revenue before the application of the discount and then the proposed volume discount is computed for each revenue level. The revenue levels begin with customers who make \$0.00 to \$0.10 with \$0.10 increments. The ranges gradually increase as the average revenue increases.

The illustrative table below reflects the replacement volume discount methodology which is used in the Price Cap Model.

Per Minute Pricing	Demand	Current Price	Proposed Price	Current Revenue	Proposed Revenue
Usage MSA 1 Band A off-peak – init min	1,583,732,399	\$0.0300	\$0.0300	\$47,511,972	\$47,511,972
Usage MSA 1 Band A peak - init min	1,580,238,832	\$0.0500	\$0.0500	\$79,011,942	\$79,011,942
Usage MSA 1 Band A shoulder – init min	773,962,939	\$0.0450	\$0.0400	\$34,828,332	\$30,958,518
Usage MSA 1 Band B off-peak – init min	277,899,501	\$0.0300	\$0.0300	\$8,336,985	\$8,336,985
Usage MSA 1 Band B peak - init min	278,249,792	\$0.0500	<b>\$0</b> .0500	\$13,912,490	\$13,912,490
Usage MSA 1 Band B shoulder – init min	143,428,561	\$0.0450	\$0.0450	\$6,454,285	\$6,454,285
Usage MSA 1 Band A off-peak – add'l min	13,468,282,374	\$-	<b>\$-</b>	\$-	<b>\$-</b>
Usage MSA 1 Band A peak - add'l min	8,375,715,822	\$-	\$-	\$-	\$-
Usage MSA 1 Band A shoulder – add'l min	4,540,231,214	\$-	\$-	<b>\$-</b>	<b>\$-</b>
Usage MSA 1 Band B off-peak – add'l min	1,575,039,927	\$0.0032	\$0.0032	\$5,008,627	\$5,008,627
Usage MSA 1 Band B peak - add'l min	1,111,884,315	\$0.0053	\$0.0053	\$5,892,987	\$5,892,987
Usage MSA 1 Band B shoulder – add'l min	610,777,246	\$0.0048	\$0.0048	\$2,913,407	\$2,913,407

Per Minute Pricing	Demand	Current Price	Proposed Price	Current Revenue	Proposed Revenue
Usage MSA 2-16	417,594,553	\$0.0336	\$0.0336	\$14,031,177	\$14,031,177
Band A off-peak - init min				, ,	, , = .,
Usage MSA 2-16 Band A peak - init	417,711,008	\$0.0560	\$0.0560	\$23,391,816	\$23,391,816
min	204 200 022	<b>#0.0504</b>	20.0504	040 004 750	040.004.
Usage MSA 2-16 Band A shoulder - linit min	204,399,923	\$0.0504	\$0.0504	\$10,301,756	\$10,301,756
Usage MSA 2-16	6,275,625	\$0.0300	\$0.0300	\$188,269	\$188,269
Band B off-peak - init min	-,	,,,,,,,,	40.000	<b>4</b> 1001200	4.00,200
Usage MSA 2-16	6,194,413	\$0.0500	<b>\$0</b> .0500	\$309,721	\$309,721
Band B peak - init					
Usage MSA 2-16	3,240,840	\$ 0.0450	\$ 0.0400	\$145,838	\$129,634
Band 8 shoulder -					
Usage MSA 2-16	3,898,564,467	\$-	\$-	\$-	\$-
Band A off-peak - add'l min					
Usage MSA 2-16	2,348,754,190	\$-	\$-	\$-	\$-
Band A peak - add'l					
Usage MSA 2-16	1,264,516,837	\$-	\$-	\$-	\$-
Band A shoulder -					
add'l min Usage MSA 2-16	34,276,896	\$0.0032	\$0.0032	\$109,001	\$109,001
Band B off-peak -	, .	,	*	<b>*</b> **, *	***************************************
add'I min Usage MSA 2-16	24,274,939	\$0.0053	\$0.0053	\$128,657	\$128,657
Band B peak - add'l min	2 1,2 1,000	ψο.σσσσ	Ψ0.0000	Ψ120,001	Ψ120,007
Usage MSA 2-16	13,420,464	\$0.0048	\$0.0048	<b>\$64</b> ,016	\$64,016
Band B shoulder - add'l min					
Volume Discount %	NA	0.00%	0.00%	NA	NA
Level 1					
Volume Discount %	NA	15.00%	15.00%	NA	NA
Level 2 Volume Discount %	NA	20.00%	20.00%	NA	NA
Level 3 Volume Discount %	NA	28.30%	33.00%	ALA	ALA.
Level 4	AVI	2 <b>0.3</b> 0%	33.00%	NA	NA
Volume Discount % Level 5	NA	33.00%	33.00%	NA	NA
Volume Discount %	NA	33.00%	33.00%	NA	NA
Level 6 Volume Discount %	NA	33.00%	33.00%	NA	NA
Level 7					
Upper Limit of Volume Discount	NA	\$2.60	\$2.60	NA	NA
Level 1					

Per Minute Pricing	Demand	Current Price	Proposed Price	Current Revenue	Proposed Revenue
Upper Limit of Volume Discount	NA	\$5.20	\$5.20		NA
Level 2 Upper Limit of Volume Discount Level 3	NA	\$10.40	\$15.00	NA	NA
Upper Limit of Volume Discount Level 4	NA	\$26.00	\$26.00	NA	NA
Upper Limit of Volume Discount Level 5	NA	\$52.00	\$52.00	NA	NA
Upper Limit of Volume Discount Level 6	NA	\$104.00	\$104.00	NA	NA
Volume Discount Impact	1	\$(40,119,784)	\$(38,179,735)	\$(40,119,784)	\$(38,179,735)
Subtotal Usage				\$212,421,493	\$210,475,523

The revenue impact of the above illustration is a reduction in revenue from \$212,421,493 to \$210,475,523 or \$1,945,97. Since this method essentially duplicates the volume discount computation for over one hundred revenue points, it neither systematically over-states or understates the revenue impact of the usage volume discount.